

Data sheet

6GK7443-1EX20-0XE0

product type designation



CP 443-1

-- spare part -- communications processor CP 443-1 for connection of SIMATIC S7-400 to industrial Ethernet over ISO, TCP/IP and UDP, S7 communication, fetch/write, send/receive with and without RFC1006 multicast, PROFINET IO controller, DHCP, SNMP V2, web, diagnostics, initialization via LAN, access protection via IP access list integrated real-time switch ERTEC 400, 2xRJ45 connection for LAN with 10/100 Mbps

transfer rate

transfer rate	
• at the 1st interface	10 ... 100 Mbit/s

interfaces

number of interfaces / according to Industrial Ethernet	2
number of electrical connections	
• at the 1st interface / according to Industrial Ethernet	2
type of electrical connection	
• at the 1st interface / according to Industrial Ethernet	RJ45 port
design of the removable storage	
• C-PLUG	No

supply voltage, current consumption, power loss

type of voltage / of the supply voltage	DC
supply voltage / 1 / from backplane bus	5 V
relative symmetrical tolerance / at DC	
• at 5 V	5 %
consumed current	
• from backplane bus / at DC / at 5 V / typical	1.4 A
power loss [W]	7.25 W

ambient conditions

ambient temperature	
• during operation	0 ... 60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
relative humidity	
• at 25 °C / without condensation / during operation / maximum	95 %
protection class IP	IP20

design, dimensions and weights

module format	Compact module S7-400 single width
width	25 mm
height	290 mm
depth	210 mm
net weight	0.7 kg

product features, product functions, product components / general

number of units	
• per CPU / maximum	14
• note	max. 4 as PN IO ctrl.

performance data / open communication

number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	64
data volume	
• as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum	2 Kibyte
number of possible connections / for open communication	64
• by means of T blocks / maximum	64
data volume	
• as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum	1452 byte
performance data / S7 communication	
number of possible connections / for S7 communication	
• maximum	128; when using several CPUs
• with PG connections / maximum	2
performance data / multi-protocol mode	
number of active connections / with multi-protocol mode	128
performance data / PROFINET communication / as PN IO controller	
product function / PROFINET IO controller	Yes
number of PN IO devices / on PROFINET IO controller / operable / total	128
number of PN IO IRT devices / on PROFINET IO controller / operable	128
number of external PN IO lines / with PROFINET / per rack	4
data volume	
• as user data for input variables / as PROFINET IO controller / maximum	4 Kibyte
• as user data for output variables / as PROFINET IO controller / maximum	4 Kibyte
• as user data for input variables per PN IO device / as PROFINET IO controller / maximum	1433 byte
• as user data for output variables per PN IO device / as PROFINET IO controller / maximum	1433 byte
• as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum	240 byte
• as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum	240 byte
product functions / management, configuration, engineering	
product function / MIB support	Yes
protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
• LLDP	Yes
configuration software	
• required	STEP 7 V5.4 SP4 or higher
product functions / diagnostics	
product function / web-based diagnostics	Yes
product functions / switch	
product feature / switch	Yes
product function	
• switch-managed	No
• with IRT / PROFINET IO switch	Yes
• configuration with STEP 7	Yes
product functions / redundancy	
product function	
• ring redundancy	Yes
• redundancy manager	Yes

protocol / is supported / Media Redundancy Protocol (MRP)	Yes				
product functions / security					
product function					
• password protection for Web applications	No				
• ACL - IP-based	Yes				
• ACL - IP-based for PLC/routing	No				
• switch-off of non-required services	Yes				
• blocking of communication via physical ports	Yes				
• log file for unauthorized access	No				
product functions / time					
product function / SICLOCK support	Yes				
product function / pass on time synchronization	Yes				
protocol / is supported					
• NTP	Yes				
further information / internet links					
internet link					
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud				
• to website: Industrial communication	https://www.siemens.com/simatic-net				
• to website: Image database	https://www.automation.siemens.com/bilddb				
• to website: CAx-Download-Manager	https://www.siemens.com/cax				
• to website: Industry Online Support	https://support.industry.siemens.com				
security information					
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Approvals / Certificates					
General Product Approval					
Declaration of Conformity	 EG-Konf.				
	 CCC				
	 EAC				
	 UL				
KC					
General Product Approval	EMV	For use in hazardous locations			
 RCM	KC	 ATEX	FM	 IECEEx	Type Examination Certificate
Marine / Shipping					Environment
 BUREAU VERITAS	 DNV	 PRIS	CCS (China Classification Society)	Confirmation	

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